

DEPARTMENT OF HEALTH SERVICES  
NEWBORN SCREENING PROGRAM  
850 MARINA BAY PARKWAY, ROOM F175  
RICHMOND, CA 94804  
(510) 412-1502

ANY HOSPITAL  
LABORATORY  
9876 First Avenue  
ANYTOWN, CA 99999

Newborn's Physician: JOHN SMITH, MD

Testing Laboratory:  
WESTERN CLINICAL LABORATORY  
408 SUNRISE AVE, ROSEVILLE, CA 95678

Directors:  
John Sherwin, Ph.D., Chief,  
Genetic Disease Laboratory, (510) 231-1790

## NEWBORN SCREENING RESULTS - INITIAL

BABY		
TestBaby		
Gender:	Female	
NBS FORM #:	2000011132	
Medical Record:	ABC1234	
BIRTH/COLLECTION INFORMATION		
	<b>Date</b>	<b>Time</b>
Baby's Birth:	07/19/05	0724
Specimen Collection:	07/21/05	0115
Age at Collection:	42 hour(s)	
Birth Weight:	2615 grams	
Ethnicity:	White, Hispanic	
Specimen Collection Site:	ANY HOSPITAL	
Feeding Type:	Breast only	
MOTHER		
TestBaby, Mom		
123 Main St.		
Anytown, CA 99999		
(800) 555-1212		

Test interpretations are based on the **Birth/Collection Information** provided above and subject to disclaimer below.

TEST - Individual analytes listed on reverse side		INTERPRETATION
Galactosemia		Negative
Primary Congenital Hypothyroidism		Negative
Congenital Adrenal Hyperplasia (due to 21-Hydroxylase Deficiency)		Negative
MS/MS Acylcarnitine Panel		Negative
MS/MS Amino Acid Panel (Including PKU)		Negative
Hemoglobinopathies		INTERPRETATION
Hb Pattern:	FA	Usual hemoglobin pattern. These results assume no transfusion prior to testing and do not rule out the possibility of a thalassemia trait or rare hemoglobin variants.

**Follow-up:**

Due to biological variability of newborns and differences in detection rates for the various disorders in the newborn period, the Newborn Screening Program will not identify all newborns with these conditions. While a positive screening result identifies newborns at an increased risk to justify a diagnostic work-up, a negative screening result does not rule out the possibility of a disorder. Health care providers should remain watchful for any sign or symptoms of these disorders in their patients. **A newborn screening result should not be considered diagnostic, and cannot replace the individualized evaluation and diagnosis of an infant by a well-trained, knowledgeable health care provider.**

*If you have questions regarding these results, please contact the Newborn Screening staff at  
Stanford University Medical Center, (650) 812-0353.*

Acylcarnitine Panel

Acylcarnitine	Reference Range	Result	Flag
FC	12 - 220 $\mu$ mol/L	18.4 $\mu$ mol/L	
FC / ( C16 + C18:1 ) Ratio	0 - 60	4.22	
C-2	5 - 85 $\mu$ mol/L	18.4 $\mu$ mol/L	
C-3	0 - 9.25 $\mu$ mol/L	1.3 $\mu$ mol/L	
C03 / C02 Ratio	0 - 0.25	0.07	
C-3DC		0.120 $\mu$ mol/L	
C-4	0 - 2 $\mu$ mol/L	0.220 $\mu$ mol/L	
C-4DC	0 - 2.6 $\mu$ mol/L	0.440 $\mu$ mol/L	
C-5	0 - 0.8 $\mu$ mol/L	0.100 $\mu$ mol/L	
C-5:1	0 - 0.4 $\mu$ mol/L	0.000 $\mu$ mol/L	
C-5OH	0 - 1.2 $\mu$ mol/L	0.240 $\mu$ mol/L	
C-5DC	0 - 0.35 $\mu$ mol/L	0.180 $\mu$ mol/L	
C-6	0 - 0.7 $\mu$ mol/L	0.100 $\mu$ mol/L	
C-8	0 - 0.5 $\mu$ mol/L	0.100 $\mu$ mol/L	
C08 / C10 Ratio		0.59	
C-8:1	0 - 0.9 $\mu$ mol/L	0.080 $\mu$ mol/L	
C-10	0 - 0.6 $\mu$ mol/L	0.170 $\mu$ mol/L	
C-10:1	0 - 0.45 $\mu$ mol/L	0.080 $\mu$ mol/L	
C-12		0.300 $\mu$ mol/L	
C-12:1		0.19 $\mu$ mol/L	
C-14	0 - 1.1 $\mu$ mol/L	0.260 $\mu$ mol/L	
C14:1	0 - 0.8 $\mu$ mol/L	0.240 $\mu$ mol/L	
C14:1 / C12:1 Ratio		1.26	
C-14OH		0.020 $\mu$ mol/L	
C-16	0 - 10 $\mu$ mol/L	3.170 $\mu$ mol/L	
C-16:1		0.270 $\mu$ mol/L	
C-16OH	0 - 0.3 $\mu$ mol/L	0.060 $\mu$ mol/L	
C-18	0 - 3.5 $\mu$ mol/L	1.040 $\mu$ mol/L	
C-18:1	0 - 4 $\mu$ mol/L	1.180 $\mu$ mol/L	
C-18:2		0.16 $\mu$ mol/L	
C-18OH	0 - 0.4 $\mu$ mol/L	0.000 $\mu$ mol/L	
C-18:1OH	0 - 0.21 $\mu$ mol/L	0.080 $\mu$ mol/L	

Amino Acid Panel

Amino Acid	Reference Range	Result	Flag
Glycine	0 - 1800 $\mu$ mol/L	620 $\mu$ mol/L	
Alanine	0 - 900 $\mu$ mol/L	311 $\mu$ mol/L	
Valine		114.2 $\mu$ mol/L	
Leucine/Isoleucine	0 - 200 $\mu$ mol/L	106.1 $\mu$ mol/L	
Leucine/Alanine Ratio	0 - 1.25	0.34	
Phenylalanine	0 - 140	71.7	
Phenylalanine/Tyrosine Ratio	0 - 2.3	0.89	
Tyrosine	0 - 700 $\mu$ mol/L	81.0 $\mu$ mol/L	
Methionine	0 - 100 $\mu$ mol/L	32 $\mu$ mol/L	
Citrulline	0 - 60 $\mu$ mol/L	20 $\mu$ mol/L	
Citrulline/Arginine Ratio		1.47	
Ornithine	0 - 450 $\mu$ mol/L	102 $\mu$ mol/L	
Ornithine/Citrulline Ratio		5.12	
Arginine	0 - 200 $\mu$ mol/L	14 $\mu$ mol/L	
Arginine/Ornithine Ratio		0.13	
Proline	0 - 400 $\mu$ mol/L	239 $\mu$ mol/L	
5-Oxoproline	-1 - 9999.9999 $\mu$ mol/L	71 $\mu$ mol/L	

Other Analytes

Analyte	Reference Range	Result	Flag
Galactose -1 -uridyl transferase	> 50 enzyme units	247.92 enzyme units	
TSH	0 - 25 mIU/mL	1.64 mIU/mL	
17 Hydroxyprogesterone (17 OHP)	< 120 nmol/L	0033.60 nmol/L	